

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OKLAHOMA

STATE OF OKLAHOMA, <i>et al.</i>)	
)	
<i>Plaintiffs,</i>)	
)	
v.)	Case No. 4:05-cv-00329-GKF-SAJ
)	
TYSON FOODS, INC., <i>et al.</i>)	
)	
<i>Defendants.</i>)	

Declaration of Wayne Grip

The undersigned, Wayne Grip, does hereby declare:

1. I am principal owner of Aero-Data Corporation in Baton Rouge, LA, which I co-founded in 1982. Aero-Data is an environmental remote sensing consulting firm specializing in the acquisition, mapping and photo-interpretation of current and historical aerial photography and in current and historical cartography. Aero-Data provides aerial photography acquisition, photogrammetric, topographic, and GIS mapping, digital image registration, and photo-interpretation services.
2. I have 27 years experience in the fields of photo-interpretation and photogrammetry. I served as a cartographic officer in the U.S. Air Force, where I analyzed aerial photography and satellite imagery to develop charts. I separated from the service with the rank of captain. I previously served as a staff geologist with the surface mining division of the Louisiana Department of Natural Resources. I am an instrument rated pilot with over 1,000 hours of photomission time as pilot in command. I hold a B.S. in geology from the University of Wisconsin at Madison, and have taken additional coursework in agronomy, also at the University of Wisconsin at Madison.
3. Under my direction, Aero-Data has completed over 700 historical photo-interpretation studies of sites throughout the United States. Our historical aerial photography studies have been used in insurance; cost recovery, class action and superfund litigation. The subjects we have evaluated and mapped include wood processing facilities, industrial plants, landfills, natural gas and oil fields, surface mines, train derailments, auto accident scenes, and pipeline ruptures.
4. I have been retained by Defendants in this matter to analyze changes in land use and river course in the Illinois River Watershed over the past century. As an initial matter this work involves the acquisition and analysis of current and historical topographical maps showing the course of various waterways. This also involves the acquisition and analysis of corresponding digital ortho quarter quad photographs, depicting the same waterways.

Based on what I previously knew about Plaintiffs' allegations, I had already begun the process of securing some of the aforementioned maps and photographs.

5. However, on May 15, 2008, Plaintiffs produced the expert report of Todd King. Mr. King's report purports to address various remediation alternatives. Mr. King's report makes the assertion that "bank erosion is not considered to be a substantial contributor to P loading to the rivers and streams of the IRW and Lake Tenkiller." King Report 3.2.2.2 at 15. I have been asked to address to the levels of erosion in the IRW over the past century.
6. In order to respond to Mr. King's assertion about the level of erosion in the IRW over the past century it will be necessary to undertake a more detailed analysis of riverbank and river course movement and land-use changes along the rivers than previously planned. In many parts of the country, historical high-altitude photographs are relatively widely available. This has proved not to be the case in the IRW. It will therefore be necessary to secure hundreds of photographic plates taken in the 1940s at a much lower altitude documenting the course of and land use alongside the river. These plates are held primarily by the National Archives and the United States Geological Survey. Securing materials from the National Archives and the USGS is a time-consuming process. In my experience, these agencies take approximately four to five months to respond to requests for historical photographic plates of large areas. For an order of this size, it is likely that they would have to send the plates out to a contractor for printing, which will further delay their production.
7. Once the plates are in my possession, the next step in the process will be to process them in a digital stereoplotter and to correlate the photographs to modern-day map coordinates. In view of the number of photographs that must be processed, this will take five to six weeks. Only after the photo plates have been processed and correlated can I begin my analysis of land-use changes, river course redirection, and river- and stream-bank erosion.
8. Once the photography has been set up, the land use interpretation map can be produced using a photointerpretation process. Because of the large area to be mapped, this process will take an additional three to four weeks.
9. Based on my past experience in the field, assuming diligent efforts on my part and assuming timely production by the agencies noted above, I believe I can complete my analysis in approximately seven months, with the potential of concluding sooner if the historical images can be obtained more quickly.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on 6/9/2008
